

130

QP
251
A1
B5

BIOLOGY OF REPRODUCTION

Official Journal of the
Society for the Study of Reproduction

EDITOR: John D. Biggers

ASSISTANT EDITOR: George J. Marcus

ASSOCIATE EDITORS:

Ralph I. Dorfman	Charles B. Metz	Neena B. Schwartz
Kristen B. Eik-Nes	A. V. Nalbandov	Emil Steinberger
Don W. Fawcett		Wesley K. Whitten
H. G. Williams-Ashman		

VOLUME 4, 1971



ACADEMIC PRESS
New York and London

Copyright ©, 1971 by The Society for the Study of Reproduction

ALL RIGHTS RESERVED

No part of this volume may be reproduced in any form, by photostat, microfilm, by retrieval system, or any other means, without written permission from the publishers

MADE IN THE UNITED STATES OF AMERICA

Contents of Volume 4

Number 1, February 1971

N. L. VANDEMARK. Introduction of the Second Carl G. Hartman Lecturer, M. C. Chang.....	1
M. C. CHANG. Second Annual Carl G. Hartman Lecture. Experimental Studies of Mammalian Spermatozoa and Eggs.....	3
J. R. HILL, JR., D. R. LAMOND, D. M. HENRICKS, J. F. DICKEY, AND G. D. NISWENDER. The Effect of Melengestrol Acetate (MGA) On Ovarian Function and Fertilization in Beef Heifers.....	16
C. A. PARIS, J. A. RESKO, AND R. W. GOY. A Possible Mechanism for the Induction of Lordosis by Reserpine in Spayed Rats.....	23
H. P. VAN KREY, P. B. SIEGEL, AND A. T. LEIGHTON, JR. Repeatability Estimates and Quantification of Uterovaginal Sperm-Host Gland Numbers and Population Patterns.....	31
D. J. BOLT, H. E. KELLEY, AND H. W. HAWK. Release of LH by Estradiol in Cycling Ewes.....	35
M. T. KANE AND R. H. FOOTE. Factors Affecting Blastocyst Expansion of Rabbit Zygotes and Young Embryos in Defined Media.....	41
J. E. WARREN, JR. AND H. W. HAWK. Enhancement by Exogenous Estradiol of IUD-Induced Luteal Regression in the Ewe.....	48
M. X. ZARROW, C. M. CHRISTENSON, AND B. E. ELEFThERIOU. Strain Differences in the Ovulatory Response of Immature Mice to PMS and to the Pheromonal Facilitation of PMS-Induced Ovulation.....	52
BRUCE D. GOLDMAN, VIRENDRA B. MAHESH, AND JOHN C. PORTER. The Role of the Ovary in Control of Cyclic LH Release in the Hamster, <i>Mesocricetus auratus</i>	57
DIANNE MOORE SMITH AND ARLAN E. S. SMITH. Uptake and Incorporation of Amino Acids By Cultured Mouse Embryos: Estrogen Stimulation... ..	66
DIANNE MOORE SMITH, SAMIR EL SAHWI, NADINE WILSON, AND DEAN L. MOYER. Effect of Polymorphonuclear Leukocytes on the Development of Mouse Embryos Cultured from the Two-Cell Stage to Blastocysts... ..	74
A. STEINBERGER AND E. STEINBERGER. Replication Pattern of Sertoli Cells in Maturing Rat Testis <i>in Vivo</i> and in Organ Culture.....	84
JERRY J. REEVES, AKIRA ARIMURA, AND ANDREW V. SCHALLY. Changes in Pituitary Responsiveness to Luteinizing Hormone-Releasing Hormone (LH-RH) in Anestrous Ewes Pretreated with Estradiol Benzoate.....	88
DUANE L. GARNER, GLENN W. SALISBURY, AND CHARLES N. GRAVES. Electrophoretic Fractionation of Bovine Acrosomal Proteins and Proteinase... ..	93

CONTENTS

B. E. HOWLAND, C. FAIMAN, AND T. M. BUTLER. Serum Levels of FSH and LH During the Menstrual Cycle of the Chimpanzee.....	101
NAZIR AHMAD. Maintenance of Pregnancy in Rats with Progesterone and Estrone: Effects on the Corpora Lutea.....	106
NEWSLETTER FROM THE EDITORS.....	
Sustaining Members.....	116
Meetings.....	116
LIST OF FORTHCOMING PAPERS.....	118

Number 2, April 1971

JOHN D. BIGGERS. Introduction.....	119
HUBERT R. CATCHPOLE. Harold Harrison Cole.....	121
THEODORE V. FISCHER. Local Pathway Controlling Luteal Function in the Guinea Pig.....	126
F. J. KARSCH, J. F. ROCHE, J. W. NOVEROSKE, D. L. FOSTER, H. W. NORTON, AND A. V. NALBANDOV. Prolonged Maintenance of the Corpus Luteum of the Ewe by Continuous Infusion of Luteinizing Hormone.....	129
A. C. MENGE. Effects of Isoimmunization and Isoantisera Against Seminal Antigens on Fertility Process in Female Rabbits.....	137
S. L. DAVIS, L. E. REICHERT, JR., AND G. D. NISWENDER. Serum Levels of Prolactin in Sheep as Measured by Radioimmunoassay.....	145
M. V. NEKOLA AND A. V. NALBANDOV. Morphological Changes of Rat Follicular Cells as Influenced by Oocytes.....	154
H. GLENN WOLFE. Genetic Influence on Gonadotropic Activity in Mice....	161
JOHN L. BOLING AND RICHARD J. BLANDAU. Egg Transport Through the Ampullae of the Oviducts of Rabbits Under Various Experimental Conditions.....	174
M. SALOMY AND M. J. K. HARPER. Cyclical Changes of Oviduct Motility in Rabbits.....	185
MARTIN DYM AND DON W. FAWCETT. Further Observations on the Numbers of Spermatogonia, Spermatocytes, and Spermatids Connected by Inter-cellular Bridges in the Mammalian Testis.....	195
MARIO A. ZAMBRANA AND GILBERT S. GREENWALD. Effects of Fetal, Ovarian, and Placental Weight of Various Number of Fetuses in the Rat.....	216
G. D. HODGEN, W. R. GOMES, AND N. L. VANDEMARK. A Testicular Iso-enzyme of Carbonic Anhydrase.....	224
LYNN R. FRASER, PRAMILA V. DANDEKAR, AND RAMA A. VAIDYA. <i>In vitro</i> Fertilization of Tubal Rabbit Ova Partially or Totally Denuded of Follicular Cells.....	229
JOHN G. VANDENBERGH. The Penile Smear: An Index of Sexual Maturity in Male Golden Hamsters.....	234
PAPERS TO APPEAR IN FORTHCOMING ISSUE.....	238

CONTENTS

Number 3, June 1971

SYMPOSIUM ON THE ENVIRONMENT AND
REPRODUCTIVE PROCESSES

PREFACE.....	v
C. H. CONAWAY. Ecological Adaptation and Mammalian Reproduction...	239
JOHN J. CHRISTIAN. Population Density and Reproductive Efficiency.....	248
MICHAEL MENAKER. Rhythms, Reproduction, and Photoreception.....	295
F. E. REGNIER. Semiochemicals—Structure and Function.....	309
CARL PFAFFMANN. Sensory Reception of Olfactory Cues.....	327
F. H. BRONSON. Rodent Pheromones.....	344

